

Operáció rendszerek Bsc

3. Gyakorlat

2022.02.22.

készítette:

Czikó Tivadar

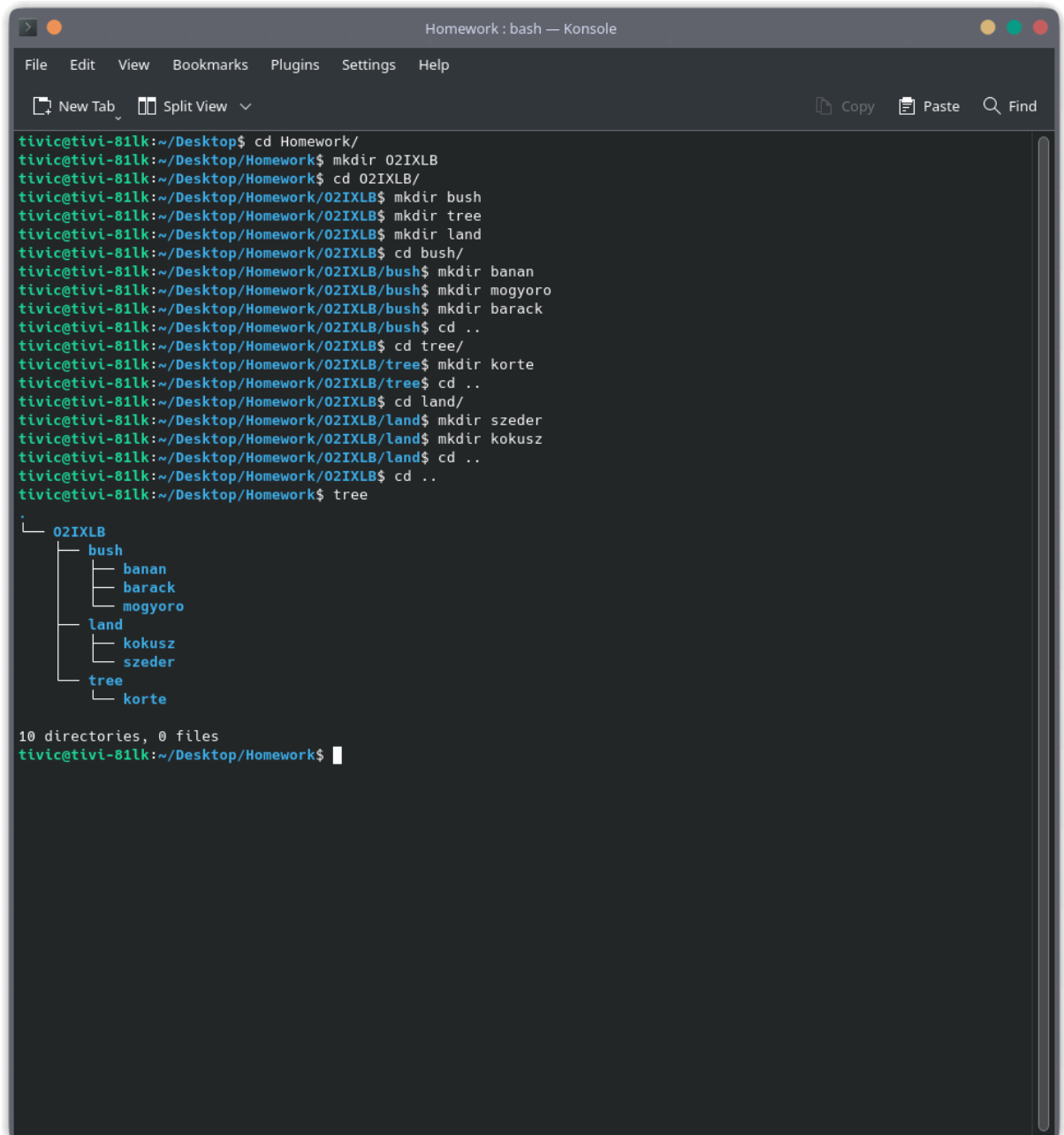
Programtervező Informatikus

O2IXLB

Miskolc, 2022

(A.) Feladat:

1. Hozza létre a következő jegyzék szerkezetet, majd listázza ki.



```
Homework : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View Copy Paste Find

tivic@tivi-81lk:~/Desktop$ cd Homework/
tivic@tivi-81lk:~/Desktop/Homework$ mkdir 02IXLB
tivic@tivi-81lk:~/Desktop/Homework$ cd 02IXLB/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ mkdir bush
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ mkdir tree
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ mkdir land
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd bush/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ mkdir banan
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ mkdir mogyoro
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ mkdir barack
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd tree/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ mkdir korte
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd land/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/land$ mkdir szeder
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/land$ mkdir kokusz
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/land$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd ..
tivic@tivi-81lk:~/Desktop/Homework$ tree

.
├── 02IXLB
│   ├── bush
│   │   ├── banan
│   │   ├── barack
│   │   └── mogyoro
│   ├── land
│   │   ├── kokusz
│   │   └── szeder
│   └── tree
│       └── korte
└── 10 directories, 0 files

tivic@tivi-81lk:~/Desktop/Homework$
```

2. Készítsen másolatot:

- a neptunkod/ land/szeder katalógusról a neptunkod/tree katalógusba
- a neptunkod /bush/banan katalógusról a neptunkod /tree katalógusba

```
O2IXLB : bash — Konsole

File Edit View Bookmarks Plugins Settings Help

New Tab Split View Copy Paste Find

tivic@tivi-81lk:~/Desktop$ cd Homework/
tivic@tivi-81lk:~/Desktop/Homework$ mkdir O2IXLB
tivic@tivi-81lk:~/Desktop/Homework$ cd O2IXLB/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ mkdir bush
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ mkdir tree
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ mkdir land
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cd bush/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/bush$ mkdir banan
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/bush$ mkdir mogyoro
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/bush$ mkdir barack
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/bush$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cd tree/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/tree$ mkdir korte
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/tree$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cd land/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/land$ mkdir szeder
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/land$ mkdir kokusz
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/land$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cd ..
tivic@tivi-81lk:~/Desktop/Homework$ tree

.
├── O2IXLB
│   ├── bush
│   │   ├── banan
│   │   ├── barack
│   │   └── mogyoro
│   ├── land
│   │   ├── kokusz
│   │   └── szeder
│   └── tree
│       └── korte
└──

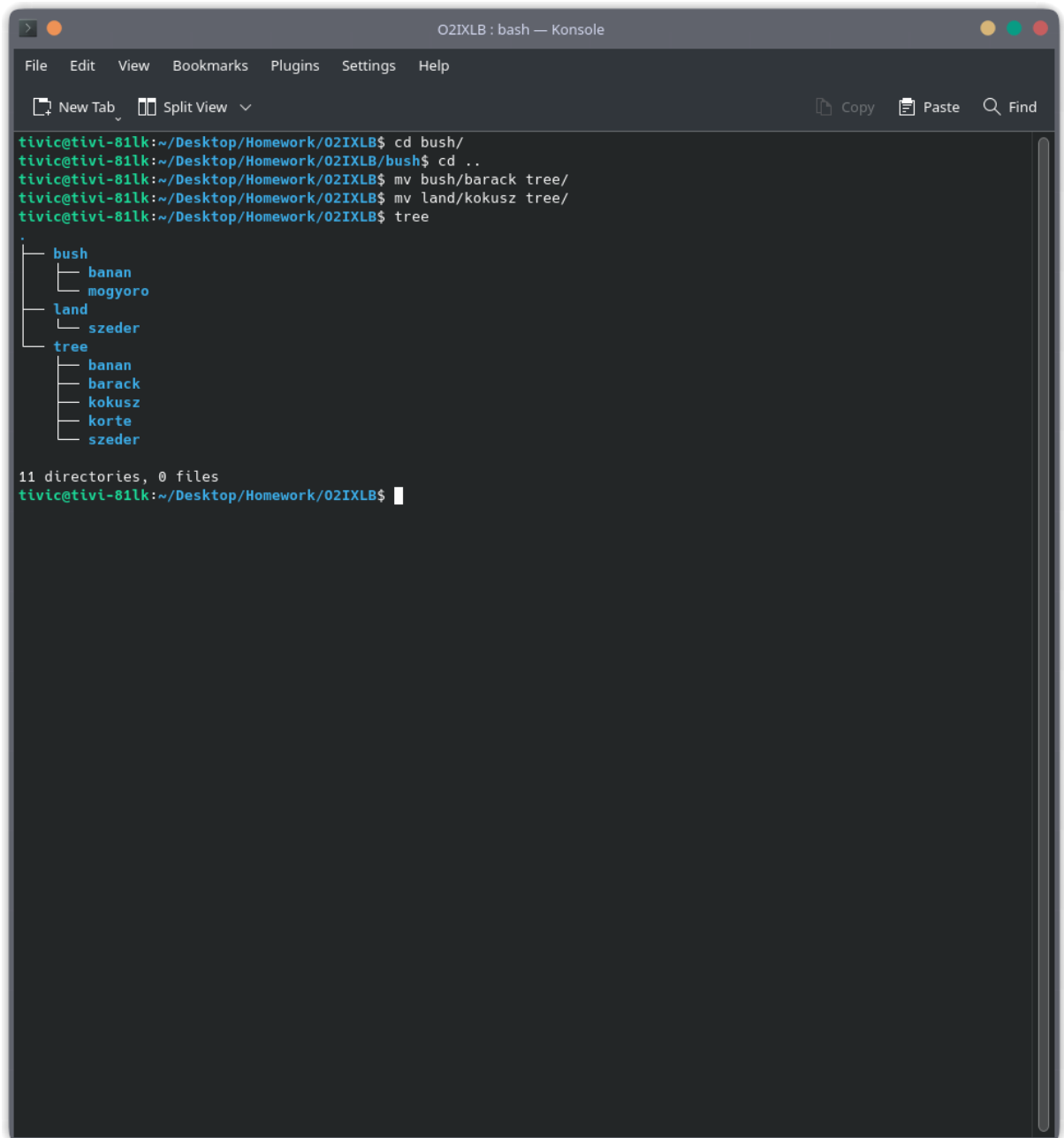
10 directories, 0 files
tivic@tivi-81lk:~/Desktop/Homework$ cd O2IXLB/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cp -R land/szeder tree/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cp -R bush/banan tree/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ tree

.
├── bush
│   ├── banan
│   ├── barack
│   └── mogyoro
├── land
│   ├── kokusz
│   └── szeder
├── tree
│   ├── banan
│   ├── korte
│   └── szeder
└──

11 directories, 0 files
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$
```

3. Végezze el a következő áthelyezéseket:

- a neptunkod / bush /barack katalógust helyezze át a neptunkod /tree katalógusba
- a neptunkod /land /kokusz katalógust helyezze át a neptunkod/tree katalógusba



```
O2IXLB : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View
Copy Paste Find

tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ cd bush/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB/bush$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ mv bush/barack tree/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ mv land/kokusz tree/
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$ tree
.
├── bush
│   ├── banan
│   └── mogyoro
├── land
│   └── szeder
└── tree
    ├── banan
    ├── barack
    ├── kokusz
    ├── korte
    └── szeder

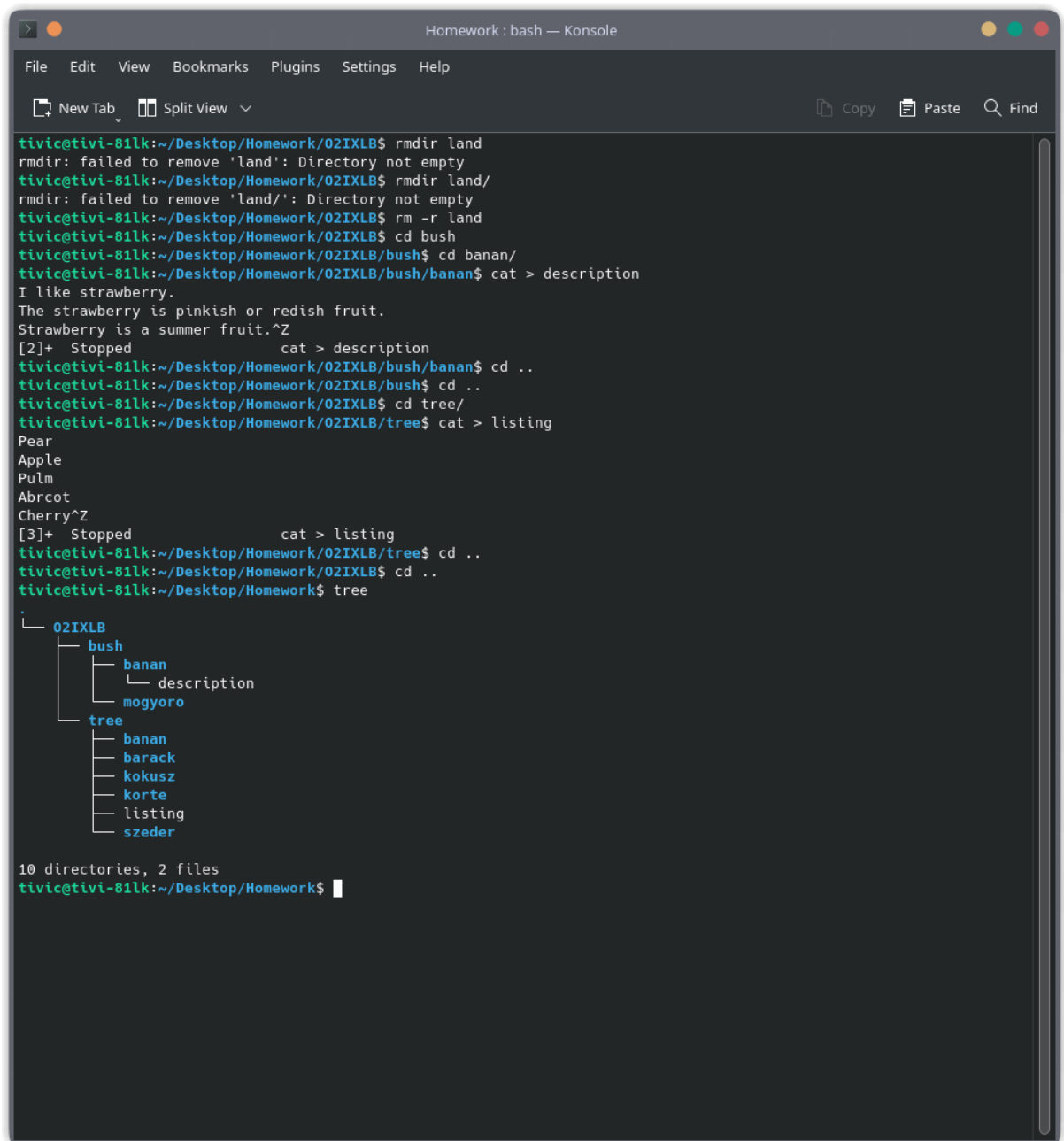
11 directories, 0 files
tivic@tivi-81lk:~/Desktop/Homework/O2IXLB$
```

4. Törölje a neptunkod/land katalógust a teljes tartalmával. Hozza létre a következő szöveges állományokat:
 - neptunkod/bush/banan/ description
 - neptunkod/tree/listing
5. A description szöveges állományba írjon 3 sort a málnáról. A listing szöveges állományba soroljon fel külön sorba 5 olyan gyümölcsöt, amelyek tree teremnek.

```
Homework : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View Copy Paste Find

tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ rmdir land
rmdir: failed to remove 'land': Directory not empty
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ rmdir land/
rmdir: failed to remove 'land/': Directory not empty
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ rm -r land
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd bush
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ cd banan/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush/banan$ cat > description
I like strawberry.
The strawberry is pinkish or redish fruit.
Strawberry is a summer fruit.^Z
[2]+ Stopped cat > description
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush/banan$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd tree/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cat > listing
Pear
Apple
Pulm
Abrcot
Cherry^Z
[3]+ Stopped cat > listing
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd ..
tivic@tivi-81lk:~/Desktop/Homework$ tree
.
├── 02IXLB
│   ├── bush
│   │   ├── banan
│   │   │   └── description
│   │   └── mogyoro
│   └── tree
│       ├── banan
│       ├── barack
│       ├── kokusz
│       ├── korte
│       ├── listing
│       └── szeder
└── 10 directories, 2 files
tivic@tivi-81lk:~/Desktop/Homework$
```

6. Listázza a neptunkod katalógus tartalmát úgy, hogy megjelenjen az alkatalógusok tartalma is. Ezután listázza az aktuális (munka)katalógus nevét.



```
Homework : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View Copy Paste Find

tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ rmdir land
rmdir: failed to remove 'land': Directory not empty
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ rmdir land/
rmdir: failed to remove 'land/': Directory not empty
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ rm -r land
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd bush
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ cd banan/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush/banan$ cat > description
I like strawberry.
The strawberry is pinkish or redish fruit.
Strawberry is a summer fruit.^Z
[2]+ Stopped cat > description
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush/banan$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd tree/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cat > listing
Pear
Apple
Pulm
Abrcot
Cherry^Z
[3]+ Stopped cat > listing
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd ..
tivic@tivi-81lk:~/Desktop/Homework$ tree

.
├── 02IXLB
│   ├── bush
│   │   ├── banan
│   │   │   └── description
│   │   └── mogyoro
│   └── tree
│       ├── banan
│       ├── barack
│       ├── kokusz
│       ├── korte
│       ├── listing
│       └── szeder
└── 10 directories, 2 files
tivic@tivi-81lk:~/Desktop/Homework$
```

7. Térjen vissza a saját home katalógusába és keresse meg az összes olyan file-t, amelyek nevének második betűje e.

```

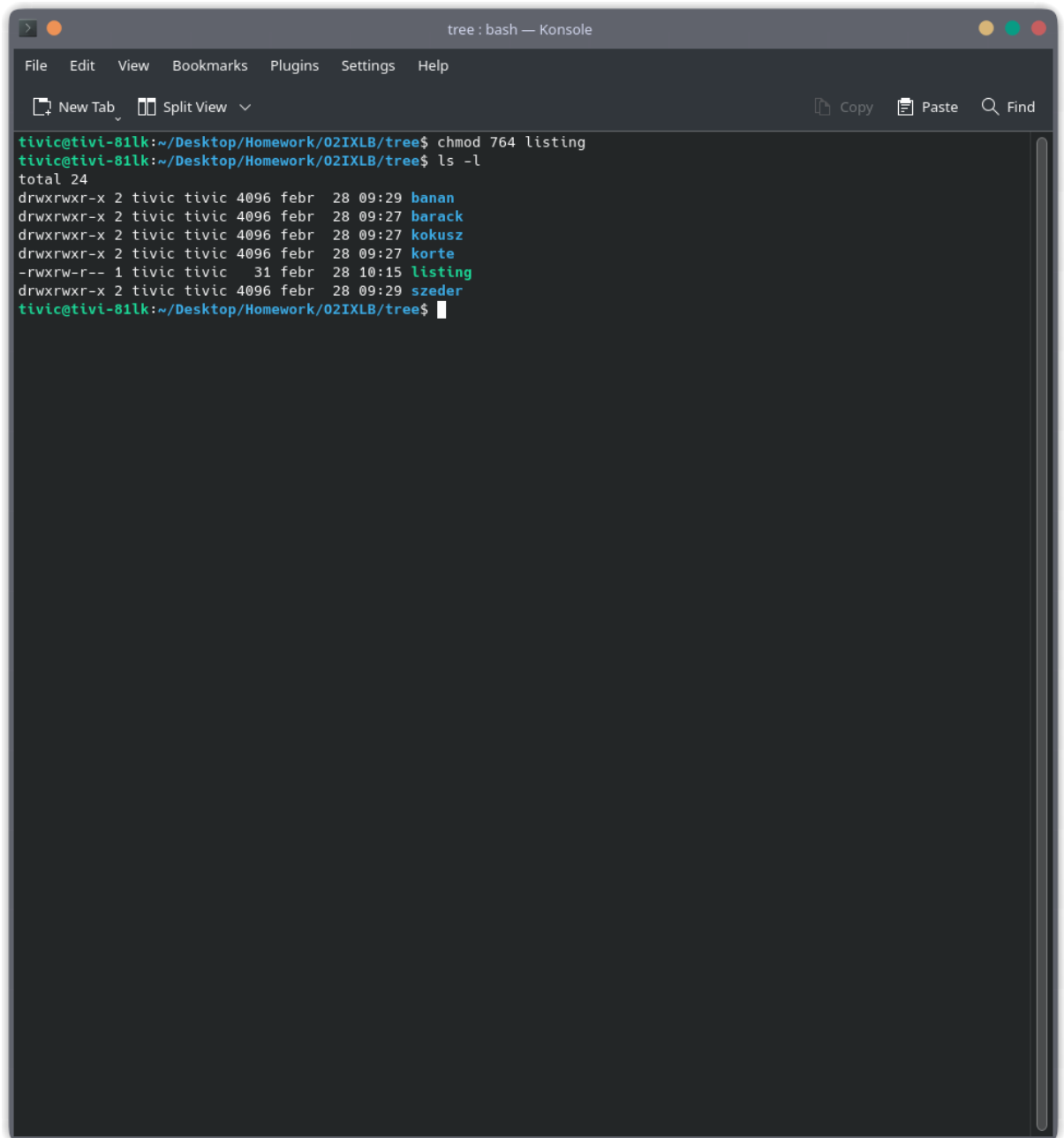
Desktop : bash — Konsole
File Edit View Bookmarks Plugins Settings Help

New Tab Split View Copy Paste Find

tivictivi-81lk:~/Desktop$ grep "e"
asdads
^Z
[4]+ Stopped grep --color=auto "e"
tivictivi-81lk:~/Desktop$ grep "e" ./
grep: ./: Is a directory
tivictivi-81lk:~/Desktop$ grep "e" ./.*
grep: ./Homework: Is a directory
grep: ./02IXLB_02_22: Is a directory
./053linux.txt:mkdir folder // create folder
./053linux.txt:cd folder/ // jump to the folder
./053linux.txt:cd .. // back jump to the folder
./053linux.txt:cp -R folder Newfolder // copy folder
./053linux.txt:ls -l //listing folder (directory)
./053linux.txt:cat > name.txt
./053linux.txt:mv folder/otherFolder/ EachOtherFolder/OwnFolder // moving folder
./steam.desktop:[Desktop Entry]
./steam.desktop:Name=Steam
./steam.desktop:Comment=Application for managing and playing games on Steam
./steam.desktop:Comment[pt_BR]=Aplicativo para jogar e gerenciar jogos no Steam
./steam.desktop:Comment[bg]=Приложение за ръководене и пускане на игри в Steam
./steam.desktop:Comment[cs]=Aplikace pro spravování a hraní her ve službě Steam
./steam.desktop:Comment[da]=Applikation til at håndtere og spille spil på Steam
./steam.desktop:Comment[nl]=Applicatie voor het beheer en het spelen van games op Steam
./steam.desktop:Comment[fi]=Steamin pelien hallintaan ja pelaamiseen tarkoitettu sovellus
./steam.desktop:Comment[fr]=Application de gestion et d'utilisation des jeux sur Steam
./steam.desktop:Comment[de]=Anwendung zum Verwalten und Spielen von Spielen auf Steam
./steam.desktop:Comment[el]=Εφαρμογή διαχείρισης παιχνιδιών στο Steam
./steam.desktop:Comment[hu]=Alkalmazás a Steam-es játékok futtatásához és kezeléséhez
./steam.desktop:Comment[it]=Applicazione per la gestione e l'esecuzione di giochi su Steam
./steam.desktop:Comment[ja]=Steam上でゲームを管理 & プレイするためのアプリケーション
./steam.desktop:Comment[ko]=Steam에 있는 게임을 관리하고 플레이할 수 있는 응용 프로그램
./steam.desktop:Comment[no]=Program for å administrere og spille spill på Steam
./steam.desktop:Comment[pt_PT]=Aplicação para organizar e executar jogos no Steam
./steam.desktop:Comment[pl]=Aplikacja do zarządzania i uruchamiania gier na platformie Steam
./steam.desktop:Comment[ro]=Aplicație pentru administrarea și jucatul jocurilor pe Steam
./steam.desktop:Comment[ru]=Приложение для игр и управления играми в Steam
./steam.desktop:Comment[es]=Aplicación para administrar y ejecutar juegos en Steam
./steam.desktop:Comment[sv]=Ett program för att hantera samt spela spel på Steam
./steam.desktop:Comment[zh_CN]=管理和进行 Steam 游戏的应用程序
./steam.desktop:Comment[zh_TW]=管理並執行 Steam 遊戲的應用程式
./steam.desktop:Comment[th]=ใช้สำหรับจัดการและเล่นเกมบน Steam
./steam.desktop:Comment[tr]=Steam üzerinden oyun oynama ve düzenleme uygulaması
./steam.desktop:Comment[uk]=Програма для керування іграми та запуску ігор у Steam
./steam.desktop:Comment[vi]=Ứng dụng để quản lý và chơi trò chơi trên Steam
./steam.desktop:Exec=/usr/bin/steam %U
./steam.desktop:Icon=steam
./steam.desktop:Terminal=false
./steam.desktop:Type=Application
./steam.desktop:Categories=Network;FileTransfer;Game;
./steam.desktop:MimeTypes=x-scheme-handler/steam;x-scheme-handler/steamlink;
./steam.desktop:Actions=Store;Community;Library;Servers;Screenshots;News;Settings;BigPicture;Friends;
./steam.desktop:PrefsNonDefaultGPU=true
./steam.desktop:X-KDE-RunOnDiscreteGpu=true

```

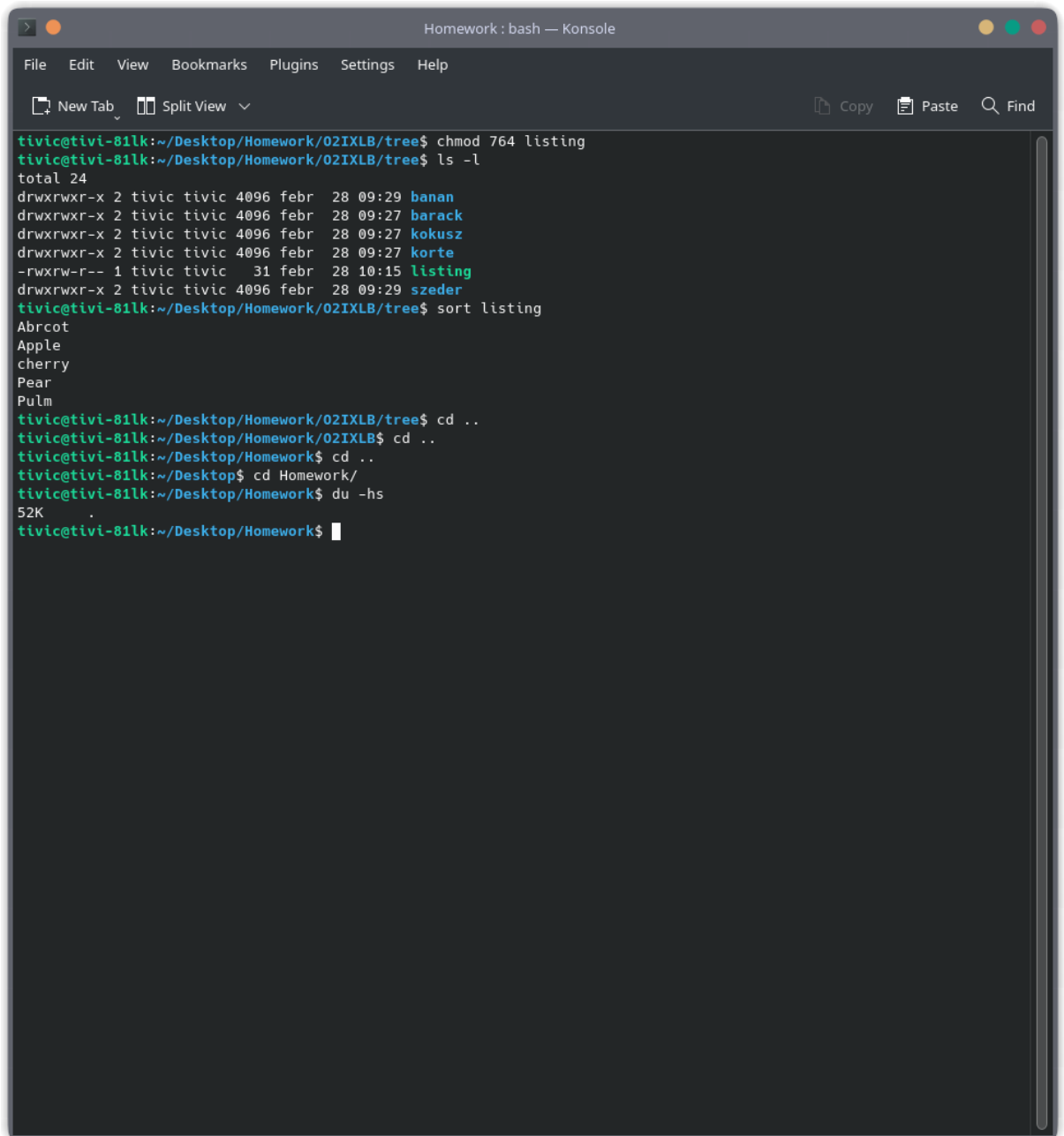
8. Tegye mindenki számára olvashatóvá a listing file-t.



A terminal window titled "tree : bash — Konsole" with a menu bar (File, Edit, View, Bookmarks, Plugins, Settings, Help) and a toolbar (New Tab, Split View, Copy, Paste, Find). The terminal shows the following commands and output:

```
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ chmod 764 listing
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ ls -l
total 24
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:29 banan
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:27 barack
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:27 kokusz
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:27 korte
-rwxrw-r-- 1 tivic tivic 31 febr 28 10:15 listing
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:29 szeder
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$
```

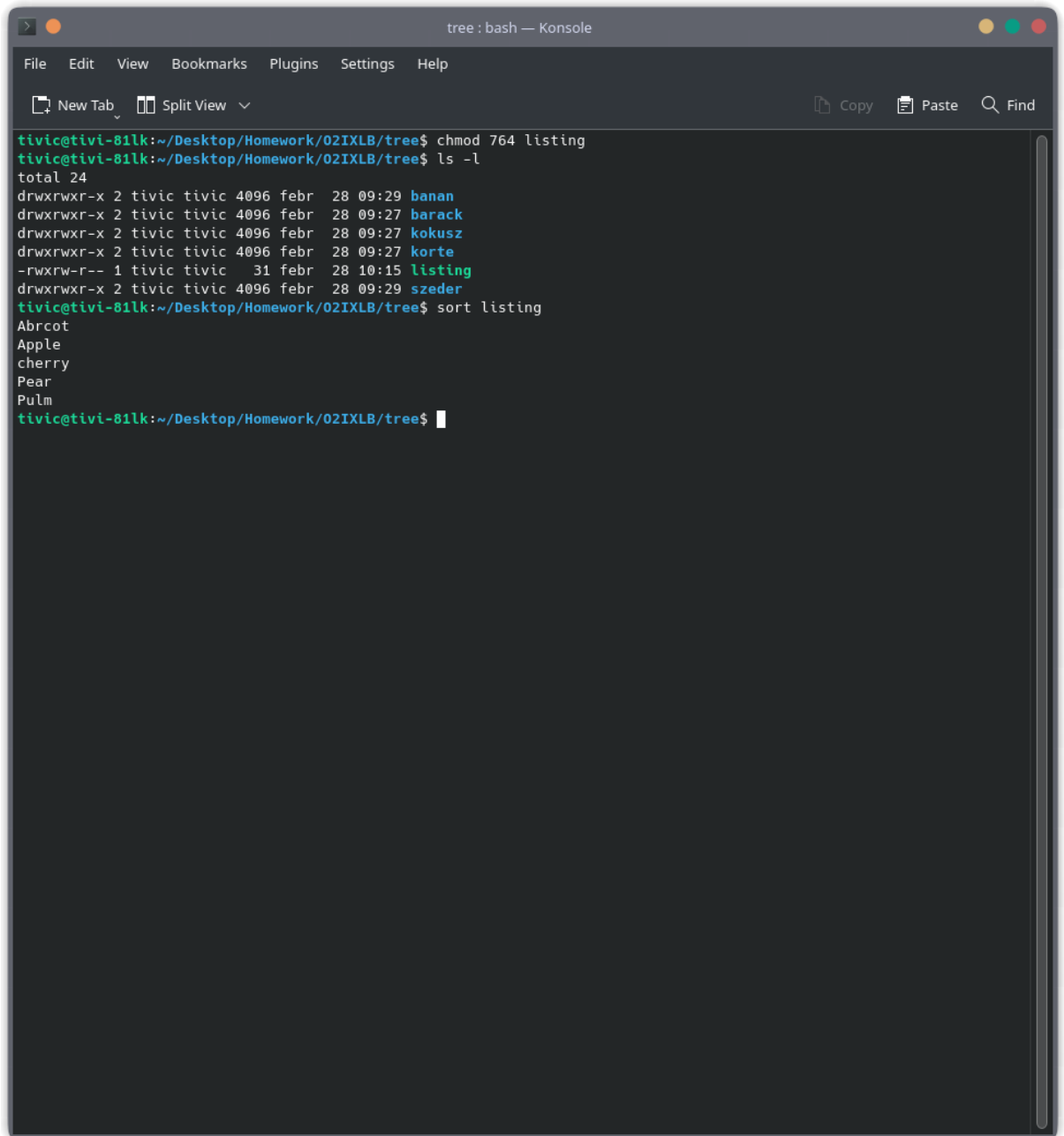

9. Listázza ki, hogy mennyi helyet foglal a merevlemezen a neptunkod katalógus az alkatalógusaival együtt. Az alkatalógusok méretei ne jelenjenek meg



```
Homework : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View
Copy Paste Find

tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ chmod 764 listing
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ ls -l
total 24
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:29 banan
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:27 barack
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:27 kokusz
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:27 korte
-rwxrwxr-- 1 tivic tivic 31 febr 28 10:15 listing
drwxrwxr-x 2 tivic tivic 4096 febr 28 09:29 szeder
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ sort listing
Abrcot
Apple
cherry
Pear
Pulm
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd ..
tivic@tivi-81lk:~/Desktop/Homework$ cd ..
tivic@tivi-81lk:~/Desktop$ cd Homework/
tivic@tivi-81lk:~/Desktop/Homework$ du -hs
52K .
tivic@tivi-81lk:~/Desktop/Homework$
```

10. Listázza ABC-szerint rendezve a listing file tartalmát.



```
tree : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ chmod 764 listing
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ ls -l
total 24
drwxrwxr-x 2 tivc tivc 4096 febr 28 09:29 banan
drwxrwxr-x 2 tivc tivc 4096 febr 28 09:27 barack
drwxrwxr-x 2 tivc tivc 4096 febr 28 09:27 kokusz
drwxrwxr-x 2 tivc tivc 4096 febr 28 09:27 korte
-rwxrw-r-- 1 tivc tivc 31 febr 28 10:15 listing
drwxrwxr-x 2 tivc tivc 4096 febr 28 09:29 szeder
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ sort listing
Abrcot
Apple
cherry
Pear
Pulm
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$
```

11. Számolja meg a description file-ban szereplő szavakat.

```
banan : bash — Konsole
File Edit View Bookmarks Plugins Settings Help
New Tab Split View Copy Paste Find
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ chmod 764 listing
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ ls -l
total 24
drwxrwxr-x 2 tiviv tiviv 4096 febr 28 09:29 banan
drwxrwxr-x 2 tiviv tiviv 4096 febr 28 09:27 barack
drwxrwxr-x 2 tiviv tiviv 4096 febr 28 09:27 kokusz
drwxrwxr-x 2 tiviv tiviv 4096 febr 28 09:27 korte
-rwxr--r-- 1 tiviv tiviv 31 febr 28 10:15 listing
drwxrwxr-x 2 tiviv tiviv 4096 febr 28 09:29 szeder
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ sort listing
Abrcot
Apple
cherry
Pear
Pulm
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/tree$ cd ..
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd ..
tivic@tivi-81lk:~/Desktop/Homework$ cd ..
tivic@tivi-81lk:~/Desktop$ cd Homework/
tivic@tivi-81lk:~/Desktop/Homework$ du -hs
52K .
tivic@tivi-81lk:~/Desktop/Homework$ cd 02IXLB
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ tree
.
├── bush
│   ├── banan
│   │   └── description
│   └── mogyoro
└── tree
    ├── banan
    ├── barack
    ├── kokusz
    ├── korte
    ├── listing
    └── szeder

9 directories, 2 files
tivic@tivi-81lk:~/Desktop/Homework/02IXLB$ cd bush/banan/
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush/banan$ wc -w description
10 description
tivic@tivi-81lk:~/Desktop/Homework/02IXLB/bush/banan$
```